

REMARKS

By this amendment, the limitation of claim 5 has been moved into claim 1, the limitation of claim 14 has been moved into claim 11, and claims 5 and 14 have been canceled. Claim 20 has been made independent, and new claims 27-36 have been added. New independent claim 32 is based upon allowable claim 8.

Claims 5 and 14 were rejected under 35 U.S.C. §103(a) over Shaohian ('091) in view of Baker ('704) and further in view of Baker II ('468). The Examiner argues that "Shaohian further teaches the dielectric element being non-circular (a wedge-shaped dielectric member 107, see fig 3c) and enabling the circuitry to determine the user rotation of the elongated member (col. 9, lines 3-13)." Applicant respectfully disagrees that this section of Shaohian reads on Applicant's limitation of determining the rotation of an elongate member, with or without lateral shifting of the dielectric element. Column 9, lines 3-13 of Shaohian reads as follows:

"A user manipulandum 112 can be coupled to the vane 110 by a linkage 114. The manipulandum can be any of a variety of objects, such as a joystick handle, mouse, steering wheel, grip, etc. the position of the vane in its degree of freedom represents a position of the manipulandum in its degree of freedom. Linkage 114 can be a simple mechanical connection or can be a multi-bar linkage, e.g., having members rotatably coupled together. The manipulandum is preferably also coupled to the vane (not shown) over capacitors C3 and C4 to allow sensing in two degrees of freedom of the manipulandum."

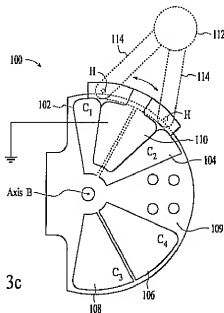
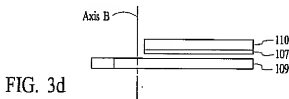


FIG. 3c

Applicant has also taken liberty to reproducing Figure 3c of the '091 patent (above), so that the relationship and operation of the various components may be better understood. Referring to the figure and the cited passage, it should be clear that the apparatus of Shaohian is capable only of determining moving with respect to a single degree of freedom and that, indeed, in order to sense two degrees of freedom, the "manipuladum" must be coupled to a vane (not shown) over capacitors C3 and C4. In any case, to the extent the device of Shaohian senses "rotation," it certainly does not and is not capable of sensing rotation with or without lateral shifting.

As to claim 20, Applicant respectfully disagrees that Shaohian teaches signal transmitting plates arranged as parallel segments in the X direction. Figure 3d, also reproduced below, is merely a cross section of Figure 3c, which shows the dielectric segments arranged radially outwardly from axis B, and not in a linear arrangement.



Based upon the foregoing amendments and comments, Applicant believes the pending application is in condition for allowance. Questions regarding this application may be directed to the undersigned attorney by telephone, facsimile or electronic mail.

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Respectfully submitted,

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